COMPACT DISC PLAYER

# DP-3060

# SERVICE MANUAL

KENWOOD

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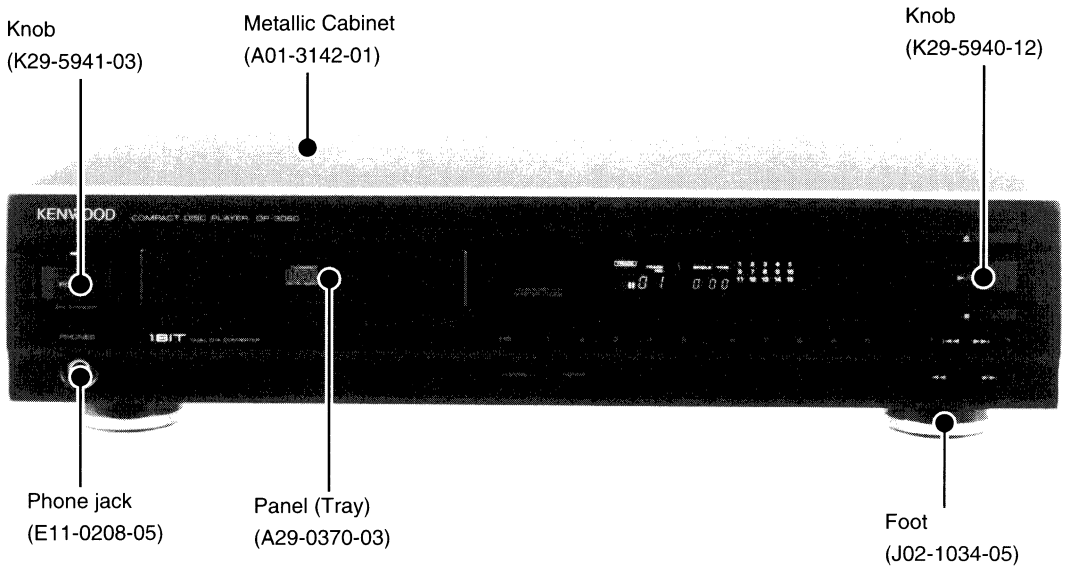
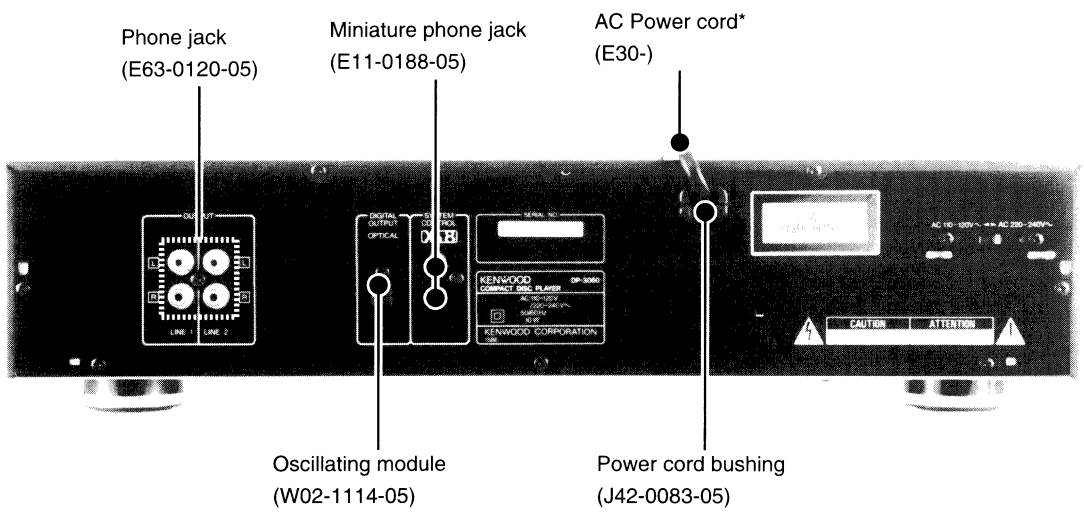
B51-4947-00 (K) 2454




In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

KENWOOD -Corp. certifies this equipment conforms to DHHS Regulations No. 21 CFR 1040. 10, Chapter 1, Subchapter J.

**DANGER : Laser radiation when open and interlock defeated. AVOID DIRECT EXPOSURE TO BEAM**

***Refer to parts list on page 20**

# DP-3060

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### CONTENTS


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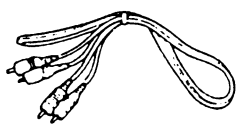
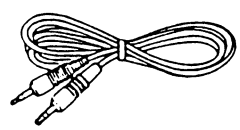
***Note** : Refer to DP-7060 service manual (B51-4938-00) if you want to know more information of Semiconductor description.

### ACCESSORIES

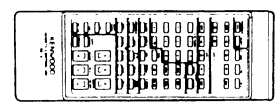
- Audio cord ..... 1
  (E30-0505-05)



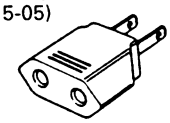
- Cord with plug (System) ..... 1
  (E30-**2733**-05)



- Remote controller assy ..... 1
  (A70-**0980**-05)
- Battery cover
  (A09-0**170**-08)

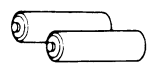


- AC plug adaptor ..... 1
  (E03-0115-05)



(Except for some areas.)
For the unit with a European AC plug in areas other than Europe.

- Battery ("A" or "R06") ..... 2
  (–)

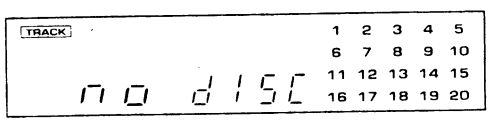


### CAUTION

#### Note related to transportation and movement

Before transporting or moving this unit, carry out the following operations.

1. **Turn the power ON but do not load a disc.**
2. **Wait a few seconds and verify that the display shown appears.**
3. **Turn the power OFF.**




#### Beware of condensation

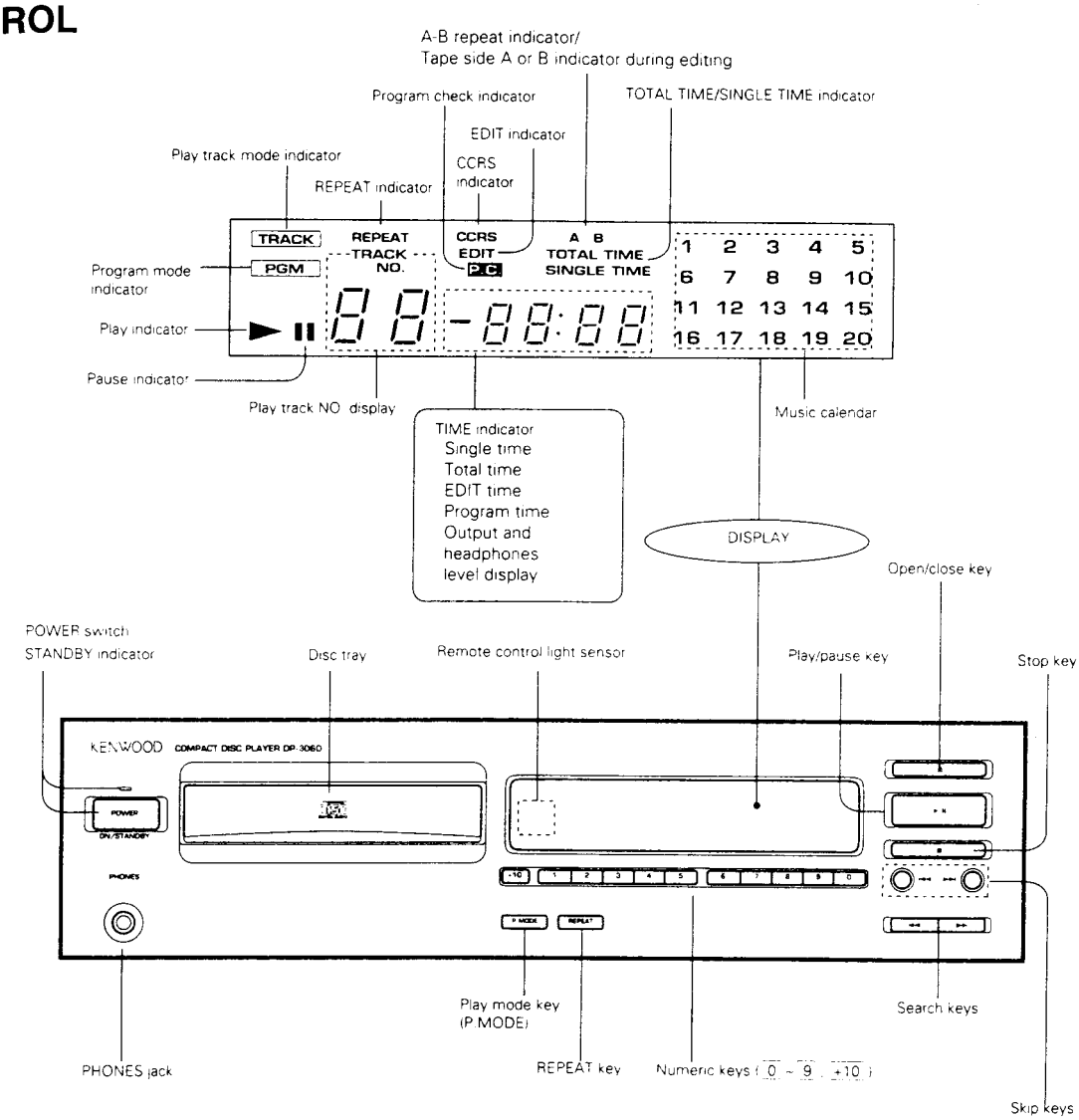
When water vapor comes into contact with the surface of cold material, water drops are produced. If condensation occurs, correct operation may not be possible, or the unit may not function correctly. This is not a malfunction, however, the unit should be dried. (To do this, turn the POWER switch ON and leave the unit as it is for several hours.)

Be especially careful in the following conditions:

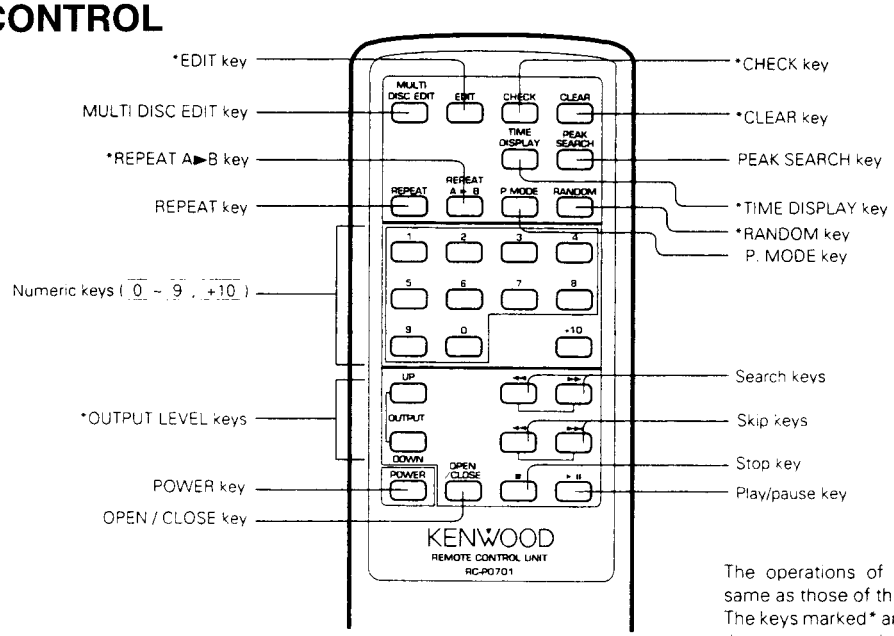
- When the unit is brought from a cold place to a warm place, and there is a large temperature difference.
- When a heater starts operating.
- When the unit is brought from an air - conditioned place to a place of high temperature with high humidity.
- When there is a large difference between the internal temperature of the unit and the ambient temperature or in conditions where condensation occurs easily.

# CONTROL/REMOTE CONTROL OPERATION

## CONTROL




## REMOTE CONTROL




The operations of each key are the same as those of the keys on the unit. The keys marked * are provided only on the remote control unit.

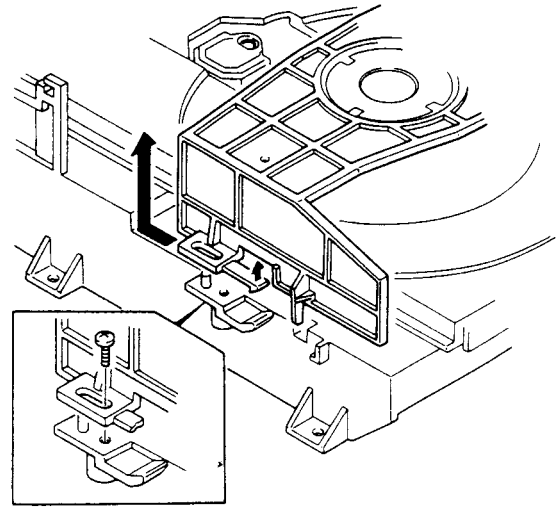
# DP-3060

## DISASSEMBLY FOR REPAIR

### 1. How to Remove Clamper

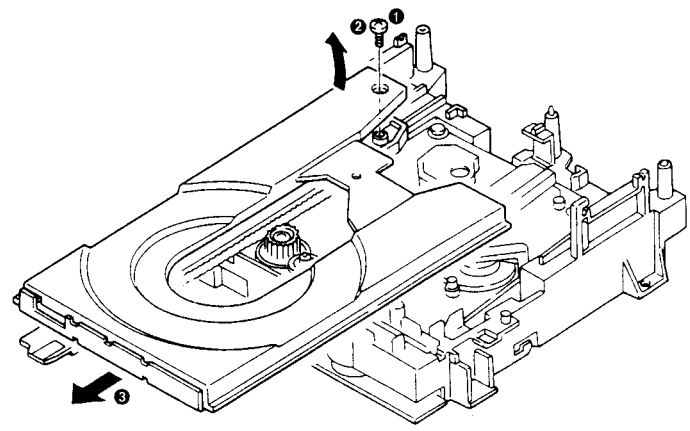
1. Remove the cabinet.
2. Remove both-sides-catchers of clamper ass'y and slide it back-wards.
3. Lift the clamper ass'y.

**Note** : If broken catcher, use screw (2.6x8:N89-2608-46) to fix it.



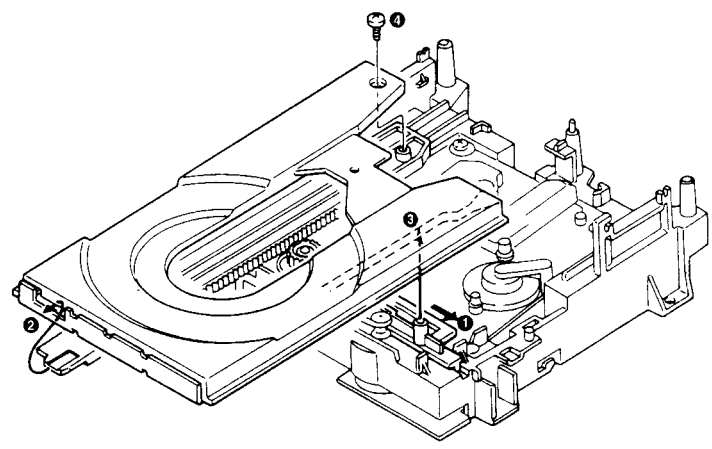
### 2. How to Remove Tray

1. Turn power switch off after tray is open.
2. Remove screw (❶).
3. Lift the tray (❷).
4. Slide the tray front-wards and remove it (❸).



### 3. How to Mount Tray

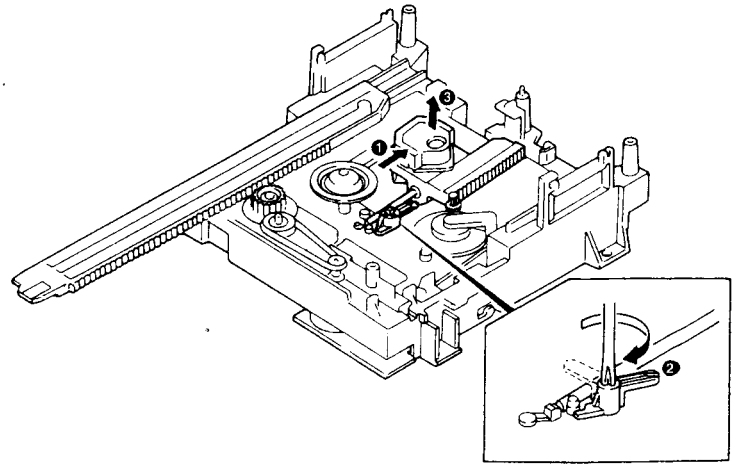
1. Slide slider fully right-wards and pull out tray gear front-wards (❶).
2. Insert tray gear in slit of tray (❷).
3. Set tray-back-groove to boss of slider (❸).
4. Fix tray with screw (❹).



# DISASSEMBLY FOR REPAIR

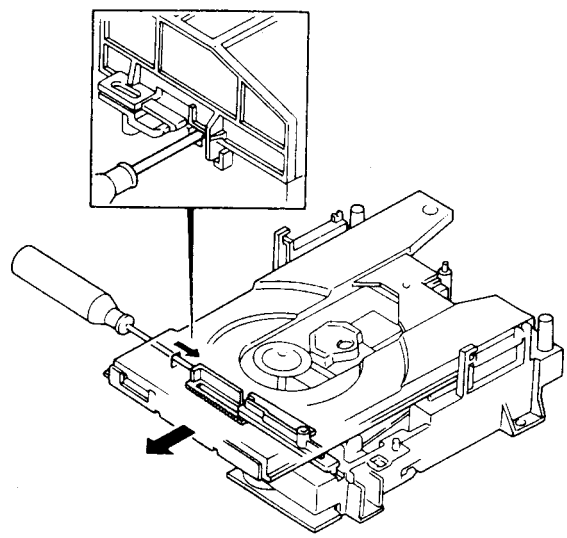
## 4. How to Replace Pickup

1. Remove clamper ass'y and set tray-open.
2. Move pickup at center position of its all travel( ❶ ).
3. Turn rod stopper ( ❷ ) and lift pickup ass'y ( ❸ ).



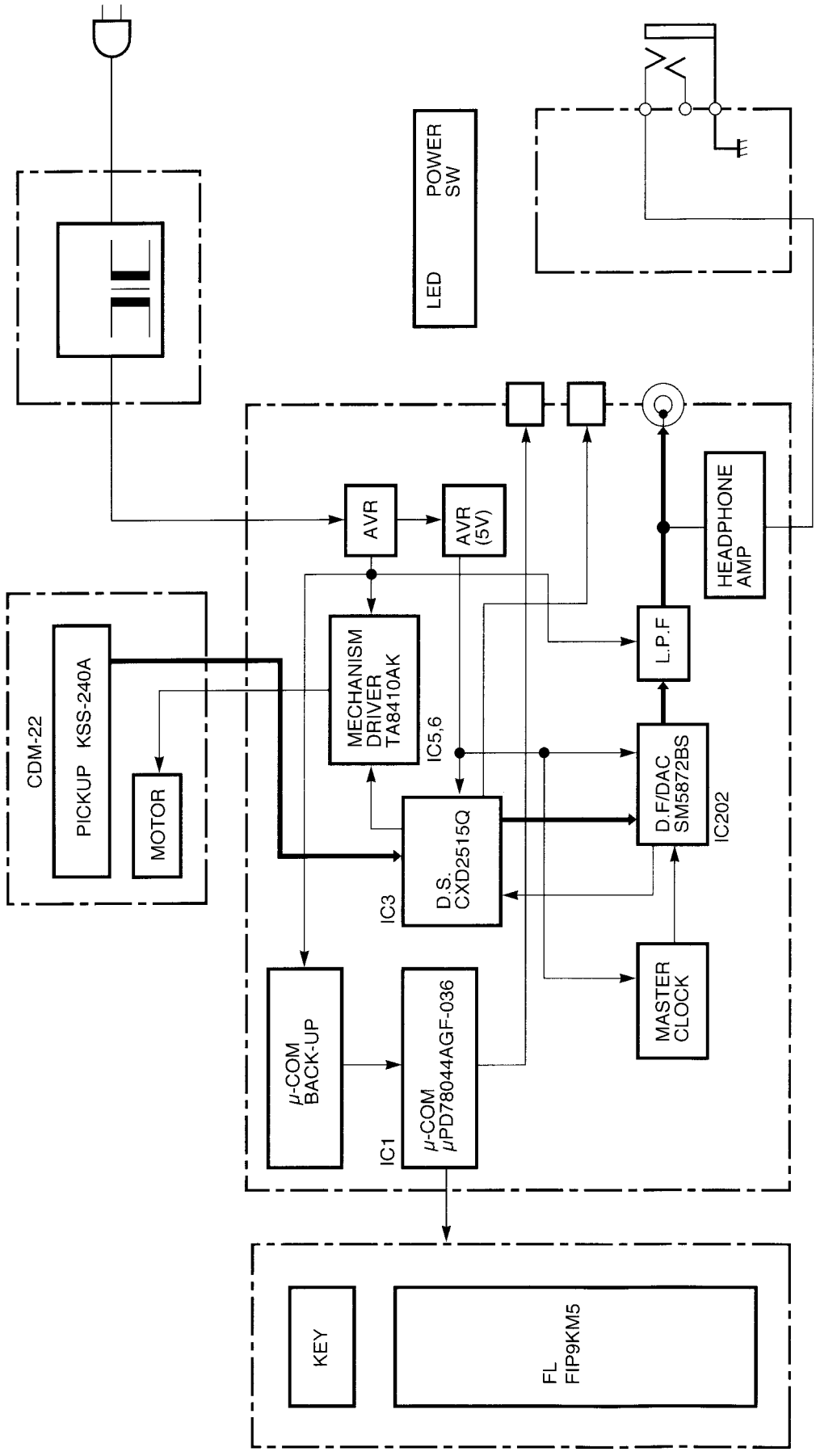

## 5. How to Open Tray when Tray Not Come Out

1. Insert screw driver to left-side hole of mechanism ass'y.
2. Push slider right-wards.



# DP-3060

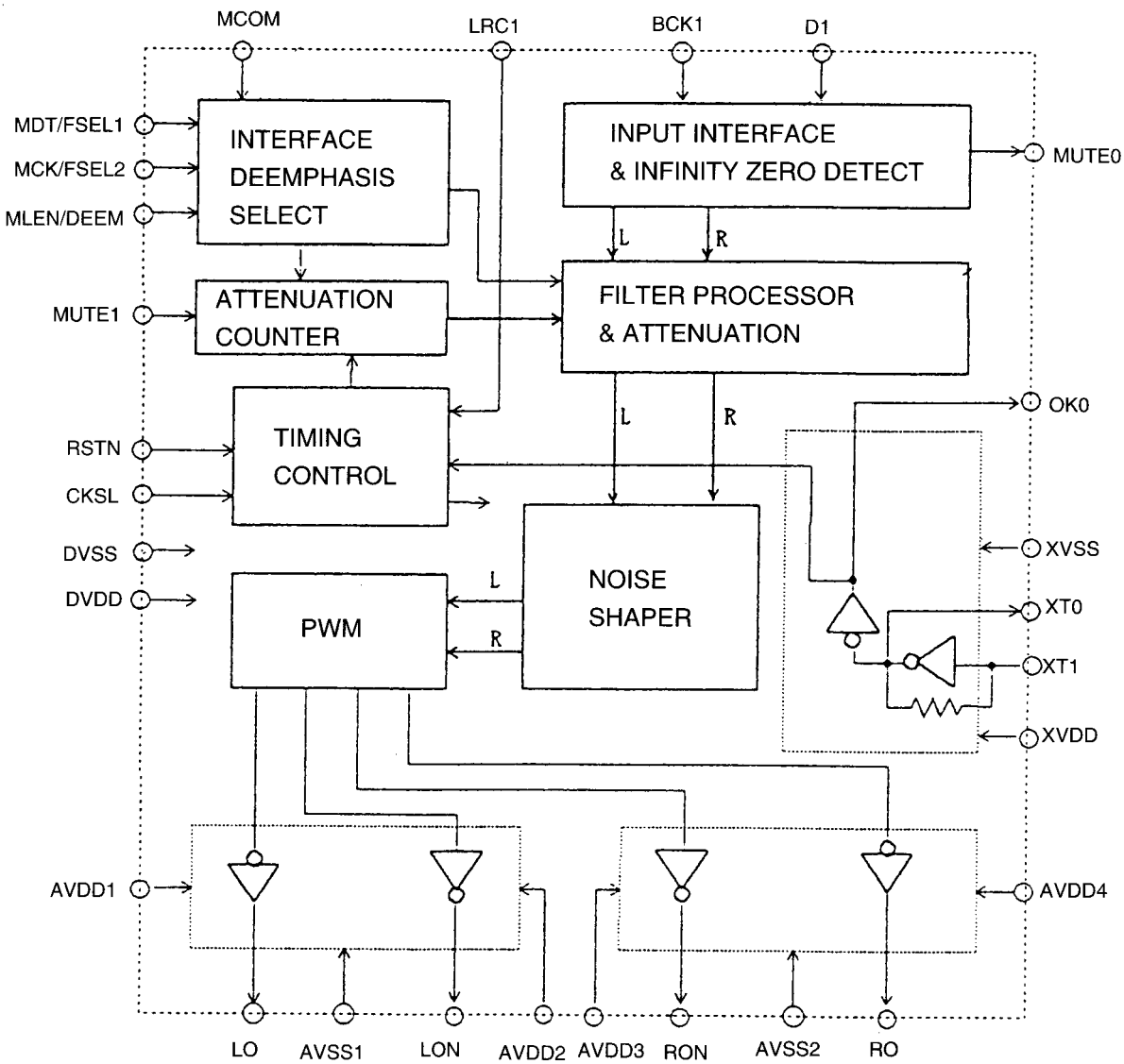
## BLOCK DIAGRAM



# CIRCUIT DESCRIPTION

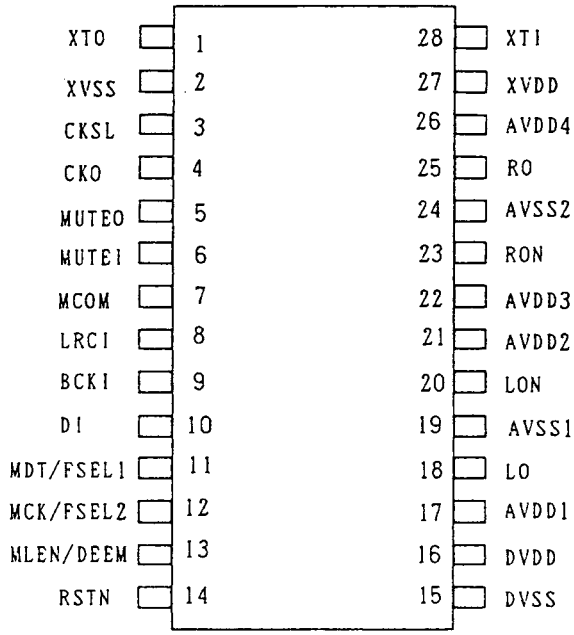
## 1. 8 TIMES OVER SAMPLING 16 BITS DIGITAL DAC : SM 5872BS(IC 202)

### 1-1. Block Diagram



# CIRCUIT DESCRIPTION

## 1-2. Pin Connection




## 1-3 Pin function

| Pin NO. | Pin name | I/O | Function |
|---|---|---|---|
| 1 | XTO | O | O Oscillation output |
| 2 | XVss | - | Crystal GND |
| 3 | CKSL | IP | Connect H level |
| 4 | CKO | O | Oscillation output |
| 5 | MUTEO | O | Infinity zero detection |
| 6 | MUTEI | IP | Mute input H=on/L=off |
| 7 | MCOM | IP | Interface select, H=control MDT, MCK, MLEN/L=FSEL1, FSEL2, DEEM |
| 8 | LRCI | IP | Input data sample rate(fs) clock. H=L-ch/L=R-ch |
| 9 | BCKI | IP | Input data bit clock |
| 10 | DI | IP | Input data |
| 11 | MDT/FSEL1 | IP | MCOM=H : MDT |
| 12 | MCK/FSEL2 | IP | MCOM=H : MCK<br>MCOM=L<br>FSEL2 / FSEL1: L: H: L: 44.1kHz: 48.0kHz: H: (44.1kHz): 32.0kHz |
| 13 | MLEN | IP | MCOM=H : MLEN (microprocessor interface latch enable) |
| | | | MCOM=L : DEEM (deemphasis control (DEEM=H/L;emphasis=on/off)) |
| 14 | RSTN | - | System reset (H=normal/L=reset) |
| 15 | DVss | - | Digital GND |
| 16 | Vdd | - | Digital Vdd (5V) |
| 17 | AVdd1 | - | Analog Vdd (5V) |
| 18 | LO | O | L-ch PWM output(+) |
| 19 | AVss1 | - | Analog GND |
| 20 | LON | O | L-ch PWM output(-) |
| 21 | AVdd2 | - | Analog Vdd (5V) |
| 22 | AVdd3 | - | Analog Vdd (5V) |
| 23 | RON | O | R-ch PWM output |
| 24 | AVss2 | - | Analog GND |
| 25 | RO | O | R-ch PWM output |
| 26 | AVdd4 | - | Analog Vdd (5V) |
| 27 | XVdd | - | Oscillation Vdd (5V) |
| 28 | XTI | I | Oscillation intput (384fs) |

IP = Input pin with pull-up resistor

# ADJUSTMENT

**Test Mode**

**Setting the test mode**

This microprocessor built this unit can be put to TEST MODE by just short-circuiting the test pins (#3 and #4) of main unit.

## Key and functions valid in test mode

| N0. | Input key | Function | Track No. display |
|---|---|---|---|
| 1 | PLAY/PAUSE ( ▶/II ) | (1)Focusing servo .....ON<br>(2) Tracking servo .....ON<br>(3) Feed servo.....ON | TRACK NO. 05 ↓ Displayed for a few seconds after completion (1), (2) and (3). ↓ Time. (Play mark), and Disc Track No. are displayed. |
| 2 | STOP ( ■ ) | (1) Focusing servo .....OFF<br>(2) Tracking servo .....OFF<br>(3) Feed servo.....OFF | *See blow |
| 3 | UP ( ▶▶I ) | Turns all FL display lamps ON. | TRACK NO. 88 |
| 4 | DOWN ( I◀◀ ) | Turns all FL display lamps OFF. | TRACK NO. 88 TRACK NO. is lighted. |

* TRACK NO.

07

08

09

FG 88

FE 88

TG 88

RF 88

VC 88

ADJUSTMENT-FREE

This device has AVERAGE and AUTO GAIN CONTROL circuitry in its as DP-3060 is adjustment-free.

Please confirm the self-check value on display as follows and dc voltage in schematic diagram before replacing pickup.

## SELF-CHECK VALUE TAVLE

| | DISPLAY VALUE |
|---|---|
| FOCUS GAIN (FG) | 18<FG<57 |
| TRACKING GAIN (TG) | 19<TG<68 |
| CENTER VOLTAGE (VC) | 25<VC<75 |
| FOCUS ERROR BALANCE (FE) | 25<FE<75 |
| RATIO FREQUENCY (RF) | 57<RF<66 |

These value is by test disk KTD-02, YEDS-18, and TCD781.

PGM in the display is blink if not adjust. Please check circuit.

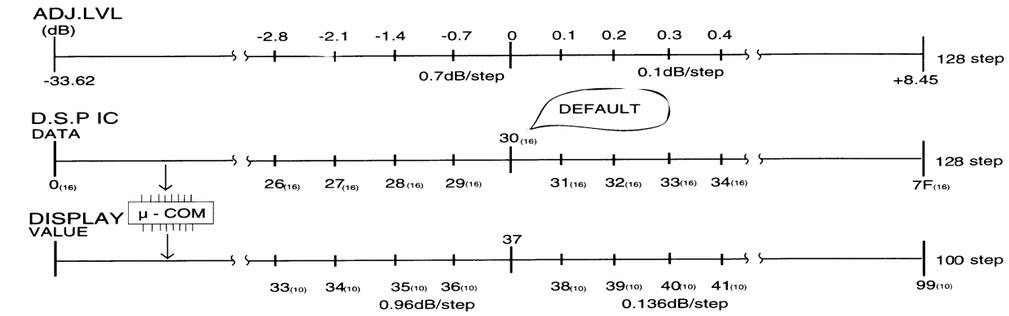


DP-3060

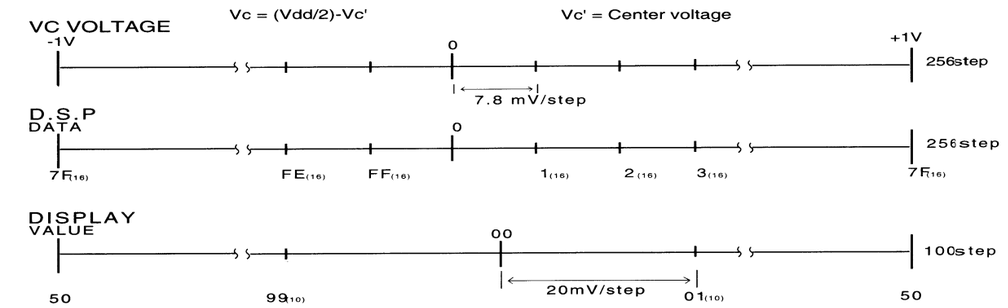
# ADJUSTMENT

## SELF-CHECK VALUE DISPLAY PROCESS

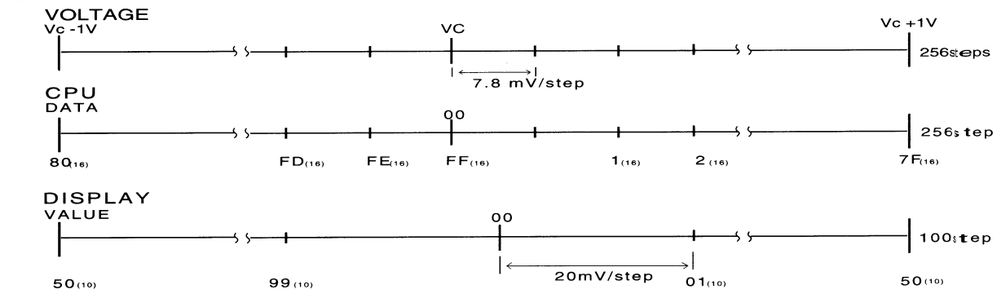
### ① FG/TG



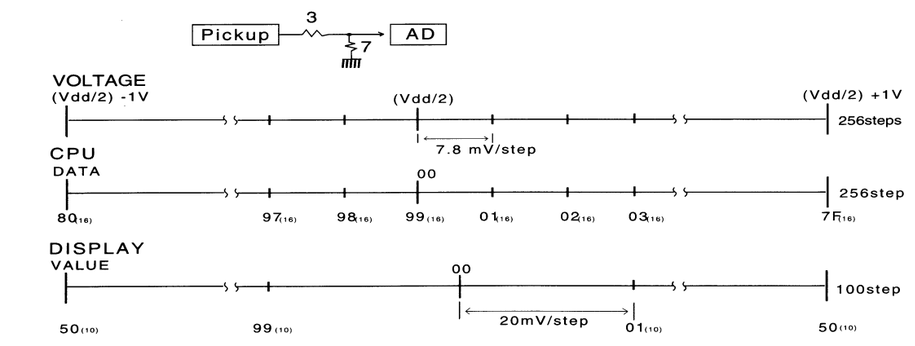

### ② VC



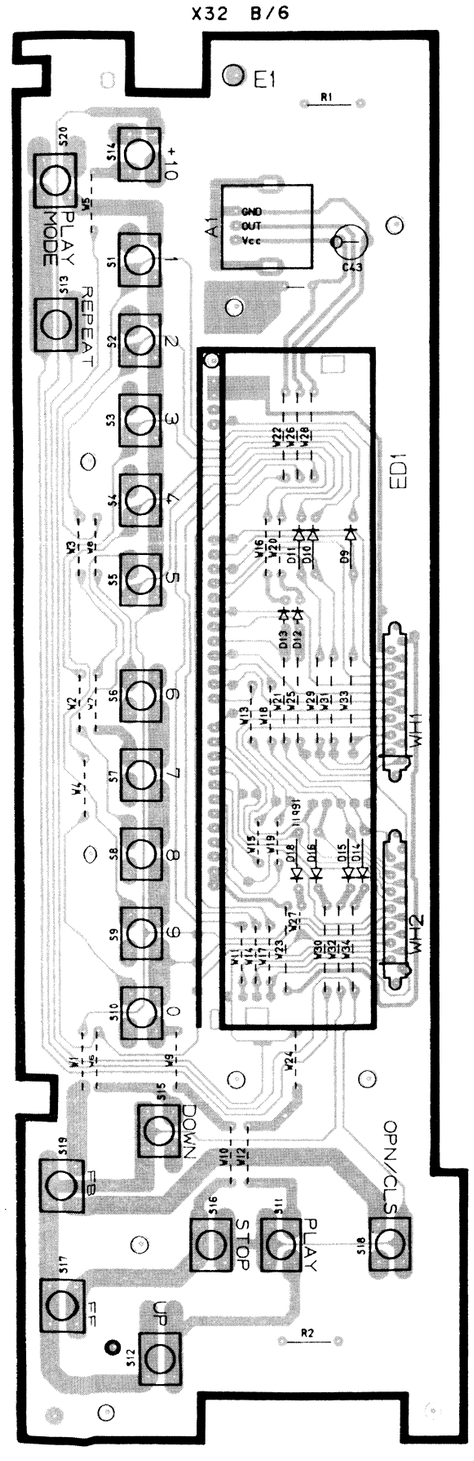

### ③ FE

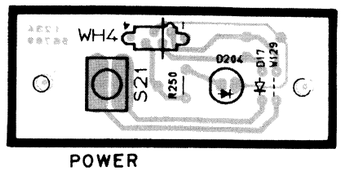


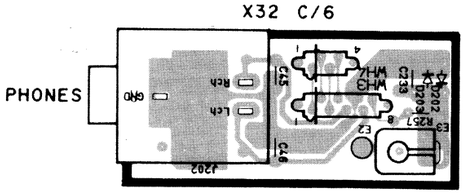

### ④ RF

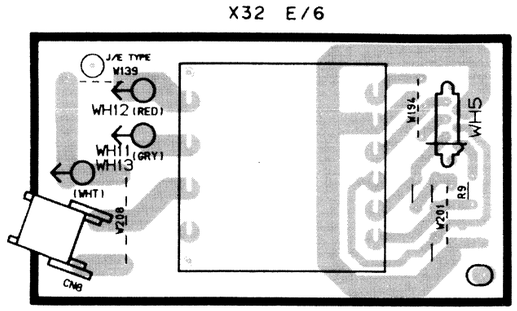


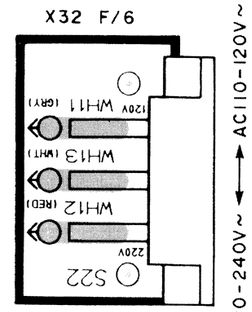
# PC BOARD (COMPONENT SIDE VIEW)



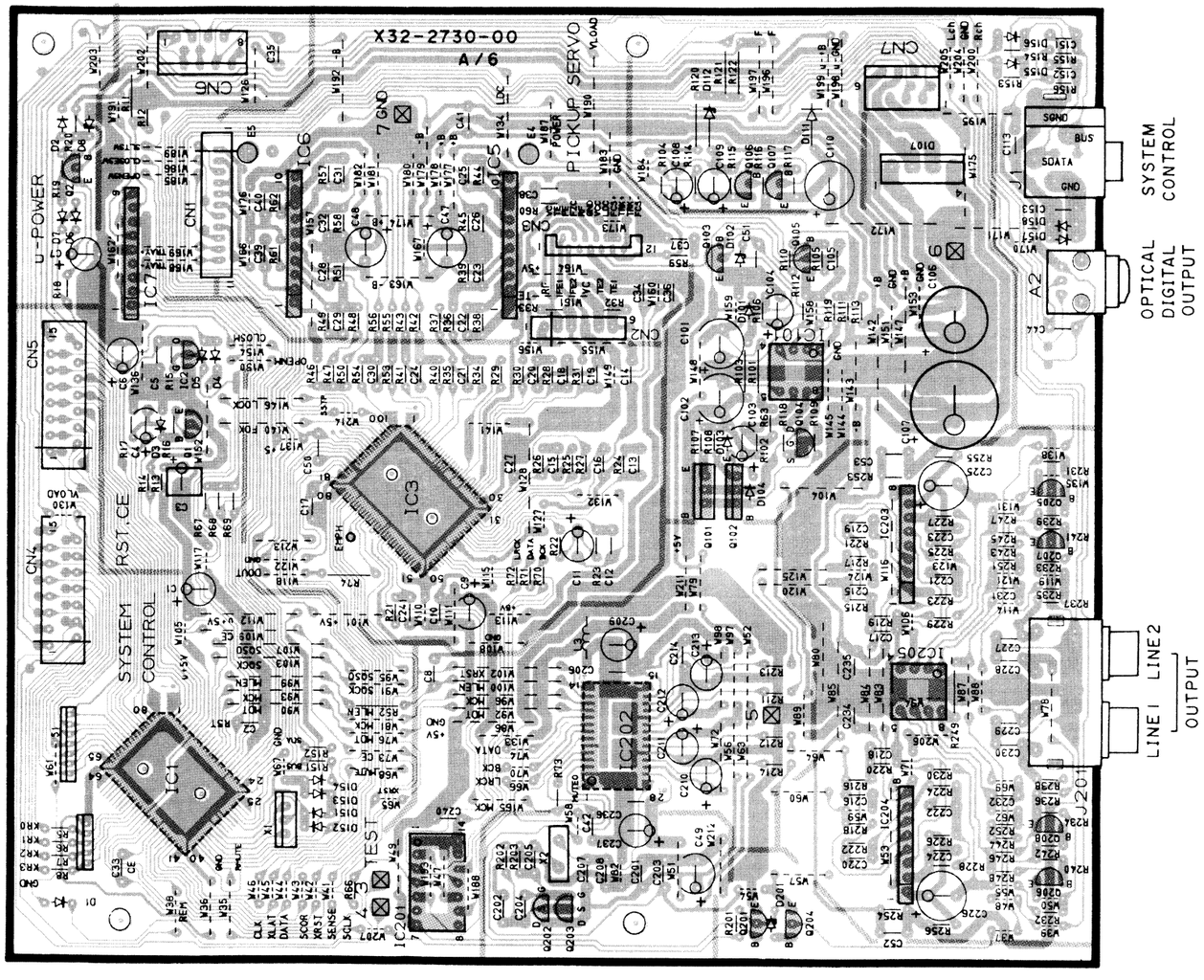




AC220-240V~ ⟷ AC110-120V~




Refer to the schematic diagram for the value of resistors and capacitors.

MECHA. ASS'Y
(X92-1759-81) CDM-22(8)GS :SINGAPORE MADE
(X92-1780-81) CDM-22(8)F :FRANCE MADE

(X25-)
(A/2)

WH2/2

FM+ GND SLS GND GND DM+

WH1/2

CLOSE GND OPEN LM+ LM-

OPEN/
CLOSE
SW

S1

(X25-4840-31)
(B/2)

FM DM LM

S2

FEED MOTOR | SLT | DISC MOTOR | LOADING MOTOR

PICKUP
(KSS-240A)

TR1 R1 C1 C5 C2 LD PD VR1

LD POWER

VR2 TRK BAL.

VR3 FCS BIAS

GND LDO PD VCC CO LDC DO GND AO NC BO RF FO RFO EO NC TE+ FA- NC FZC VC FE NC TE

PD & RF AMP

FOCUS COIL

TRACKING COIL

| CN3 | |
|---|---|
| 12 | FCS- |
| 11 | TRK- |
| 10 | TRK+ |
| 9 | FCS+ |
| 8 | LDC |
| 7 | VCC |
| 6 | GND |
| 5 | RF |
| 4 | FZC |
| 3 | FE |
| 2 | TE |
| 1 | VC |

| CN2 | |
|---|---|
| 6 | TE1 |
| 5 | TE2 |
| 4 | VC |
| 3 | FE2 |
| 2 | FE1 |
| 1 | RF |

ADJUSTMENT

| CN1 | |
|---|---|
| 1 | FEED+ |
| 2 | FEED- |
| 3 | SLT SW |
| 4 | GND |
| 5 | SPINDLE- |
| 6 | SPINDLE+ |
| 7 | CLOSE SW |
| 8 | GND |
| 9 | OPEN SW |
| 10 | TRAY+ |
| 11 | TRAY- |

(X32-2730-21)(A/6)

DIGITAL OUTPUT
OPTICAL

A2 GND C44 0.1 +5V D.OUT

IC3
DIGITAL SIGNAL
PROCESSOR

SFOR SSTP LOCK MDS MDP MON FSW FOK DFCT MIRR DVDD COUT CLOK XLAT DATA ATSK DFSW SCLK DIRC XRST

SRON SRDR SFON TFDR TRCN TRDR TFCN FFDR FRCN FRDR FFON VCOO VCOI TEST DVSS TES2 TES3 PDO VPCO VCKI AVDD IOEN AVSS ADII ADIO RFDC TE SE FE VC

SENSE MUTE SQCK SQSO EXCK SBSO SCOR WFCK EMPH DOUT MD2 C16M C4M FSTO FSTI DVSS XTSL XTAO XTAI DA01 DA02 DA03 DA04 DA05 DA06 DA07 DA08 DA09 DA18 DA11

FILO FILI PCO CLTV AVSS RFAO BIAS ASYI ASYO AVDD DVDD ASYE PSSL WDCX LRCK DATA BCK DA14 DA13 DA12

R54 8.2K R53 8.2K R40 8.2K R41 8.2K R34 8.2K R35 8.2K R29 33K R30 15K R31 15K R28 100K R25 3.3K R26 3.3K R15 0.047 R27 11K R24 1M R23 1K R22 10K C20 470P C18 0.1 C19 470P C27 0.1 C11 4.7u C12 0.01 C13 220P C16 1500P C14 4700P C17 0.01 C50 0.1 R66 15K R70 360 R71 360 R72 360 C9 100u10 C10 0.1

PLAY: 0.2V | PLAY:0.4V | PLAY: 2.6V | PLAY: 2.5V | PLAY: 2.4V | STOP:2.5V PLAY :2.6V

IC202
DIGITAL
FILTER/DAC

RST DVSS MLEN DVOO MCK AVOO HDT LO DI AVSS BCKI LON LRCK AVOO2 MCOM AVOO3 MUTEI ROH MUTEO AVSS2 CKO RO CKSL AVOO4 XVSS XVOO XTO XTI

C8 100P R52 1K C240 0.1 C241 1000P C42 18P C236 0.1 C237 100u10 C209 100u10 C208 0.1 C213 100u10 C214 0.1 C212 100u10 C211 100u10 C210 100u10

4.6V 4.75V 0V 4.5V 2.36V 4.7V

R213 10K R217 2K C219 330P R221 12K R205 3K IC203 (1/2) R223 2.2K C221 6800P

R211 10K R215 2K C215 330P L3 R219 12K L.P.F.

R212 10K R216 2K C217 330P C218 330P R220 12K C222 6800P

C216 330P R214 10K R218 2K IC204 (1/2) R224 2.2K R226 3K C220 330P R222 12K

IC1
μ-COM

X1 4.194MHz

SDATA BUSY POWER RMUTE MUTE CLOK XLAT DATA SCOR XRST REM GND SCLK SENSE CE 5V KR3 KR2 KR1 KR0 PLAY LED

IC7
TRAY
OPEN/CLS

CLSM VREF TRAY VSS GND NC TRAY- VCC OPENM

CLS:4.4V OPN:0.7V | OPN:4.4V CLS:0.7V

R11 1K R12 6.2K C41 C1

IC5 (1/2) IC6 (1/2) MOTOR DRIVER

R42 6.8K R44 15K C25 330P C24 220P R43 6.8K C26 330P R45 15K C37 0.1 R59 10 C47 100u35 R48 22K R49 22K C29 6800P R47 6.8K R50 10K R46 6.8K C28 0.1 R51 75K R57 18K C31 2700P R55 6.8K C30 4700P R56 6.8K C32 2700P R58 18K C48 100u35

ACTUATER DRIVER

R36 6.8K C22 330P R38 15K R37 6.8K C21 470P C23 330P R39 15K R60 10 C38 0.1

C33 0.1 C1 100u10

CN4 (A) | CN5 (B)

2SA1534A
2SC2878
2SC3940A

2SA1175
2SC2785

DTC124ES
2SA933S
2SC1740S

| PRODUCT. P. | MECHANISM ASS'Y | ELECTRIC UNIT |
|---|---|---|
| SINGAPORE MADE | X92-1759-81 CDM-22(8)GS | |
| FRANCE MADE | X92-1780-81 CDM-22(8)F | X25-4840-31 |

D1~7,9~17,101,103,104,151~158,202,203 :1SS133 or HSS104
D8 :MTZJ6.2(B) or RD6.2ES(B2)
D102 :RD5.1JS(B2) or HZS5.1S(B2)
D107 :1B4B41
D111 :S5688B or 1SR139-100
D112,201 :MTZJ5.6(B) or RD5.6ES(B2)
D204 :B30-1288-05

Q1 :2SC2785(F,E) or 2SC1740S(Q,R)
Q2,107 :2SC3940A
Q101,102 :2SD2012
Q103 :2SA1534A
Q104 :2SK163(L,M)
Q105,205~208 :2SC2878(B)
Q106 :2SA1175(F,E) or 2SA933S(Q,R)
Q201,204 :DTC124ES or UN4212
Q202,203 :2SK161(GR)

IC1 :μPD78044AGF-036
IC2 :MN1381-R(TA)
IC3 :CXD2515Q
IC5,6 :TA8410AK
IC7 :TA8409S
IC101 :NJM4558D
IC202 :SM5872BS
IC203,204 :NJM4565L
IC205 :NJM4580D

ED1 :FIP9KM5

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is retuned to the customer.

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

F G H I J K L M N O P

DIGITAL OUTPUT OPTICAL

A2 GND D.OUT +5V

IC202 DIGITAL FILTER/DAC

IC203 (1/2) IC203 (2/2) IC204 (1/2) IC204 (2/2) L.P.F

IC205 (1/2) IC205 (2/2) HEADPHONE AMP

Q204 MUTE

RESET IC IC2

IC1 μ-COM

IC3 TAL SIGNAL OCESSOR

IC7 TRAY OPEN/CLS

IC101 (1/2) IC101(2/2)

J201 Lch Rch OUTPUT1 2V rms.

J202 PHONES

Lch Rch OUTPUT2

(X32- )(C/6)

(X32- )(D/6)

CN6 WH3

J1 SYSTEM CONTROL

±5V AVR

POWER S21

WH4

WH5 CN7

CN4 CN5 TEST

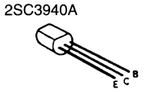
X1 4.194MHz X2 16.9344MHz

PLAY: 2.6V PLAY: 2.5V PLAY: 2.4V

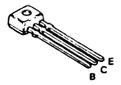
STOP:-0.7V PLAY:-5.0V STOP:-4.4V PLAY:-1.5V PLAY:-10.8V STOP:-11.4V PLAY:3.4V STOP:0V STOP:4.7V PLAY:0V STOP:-11.4V PLAY:-10.8V

ured with a high impedance voltmeter. Values may vary
etween individual instruments or/and units.

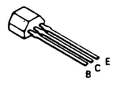
2SA1534A
2SC2878
2SC3940A



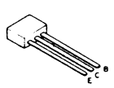
2SA1175
2SC2785



DTC124ES
2SA933S
2SC1740S

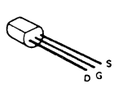


UN4212

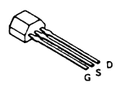


2SD2012

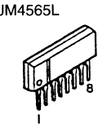
2SK163



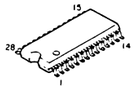
2SK161



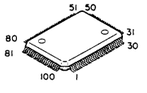
NJM4565L



SM5872BS



CXD2515Q



TA8410AK

NJM45

L M N O P Q R S T U

(X32- )(B/6)

(X32- )(C/6)

(X32- )(D/6)

(X32- )(F/6)

(X32- )(E/6)

(M)TYPE

(X,T,E,G)TYPE

(X32- )(E/6)

| PRODUCT. P. | DESTINATION | | CD PLAYER UNIT |
|---|---|---|---|
| | COUNTRY | ABB. | |
| SINGAPORE MADE | GENERAL MARKET | M | X32-2730-21 |
| | AUSTRALIA | X | X32-2730-00 |
| | U.K. | T | |
| | EUROPE | E | |
| | GERMANY | G | |
| FRANCE MADE | U.K. | T | X32-2852-70 |
| | EUROPE | E | |
| | GERMANY | G | |

REC LINE
SIGNAL LINE
GND LINE
+B LINE
-B LINE

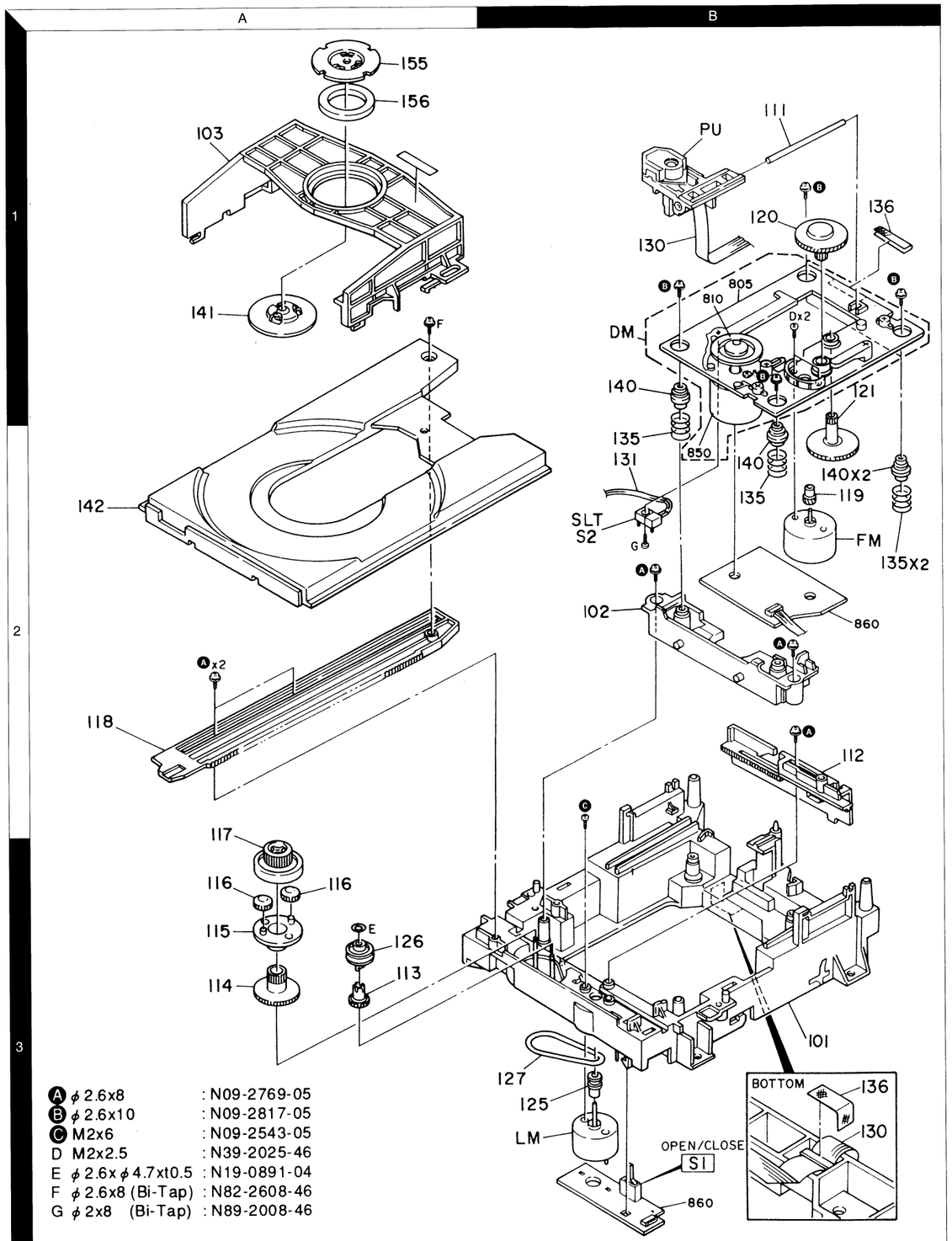
2SD2012 2SK163 2SK161 NJM4565L SM5872BS CXD2515Q TA8410AK NJM4580D TA8409S NJM4558D

Y22-3750-21

DP-3060
KENWOOD

DP-3060

# EXPLODED VIEW (MECHANISM) SINGAPORE MADE



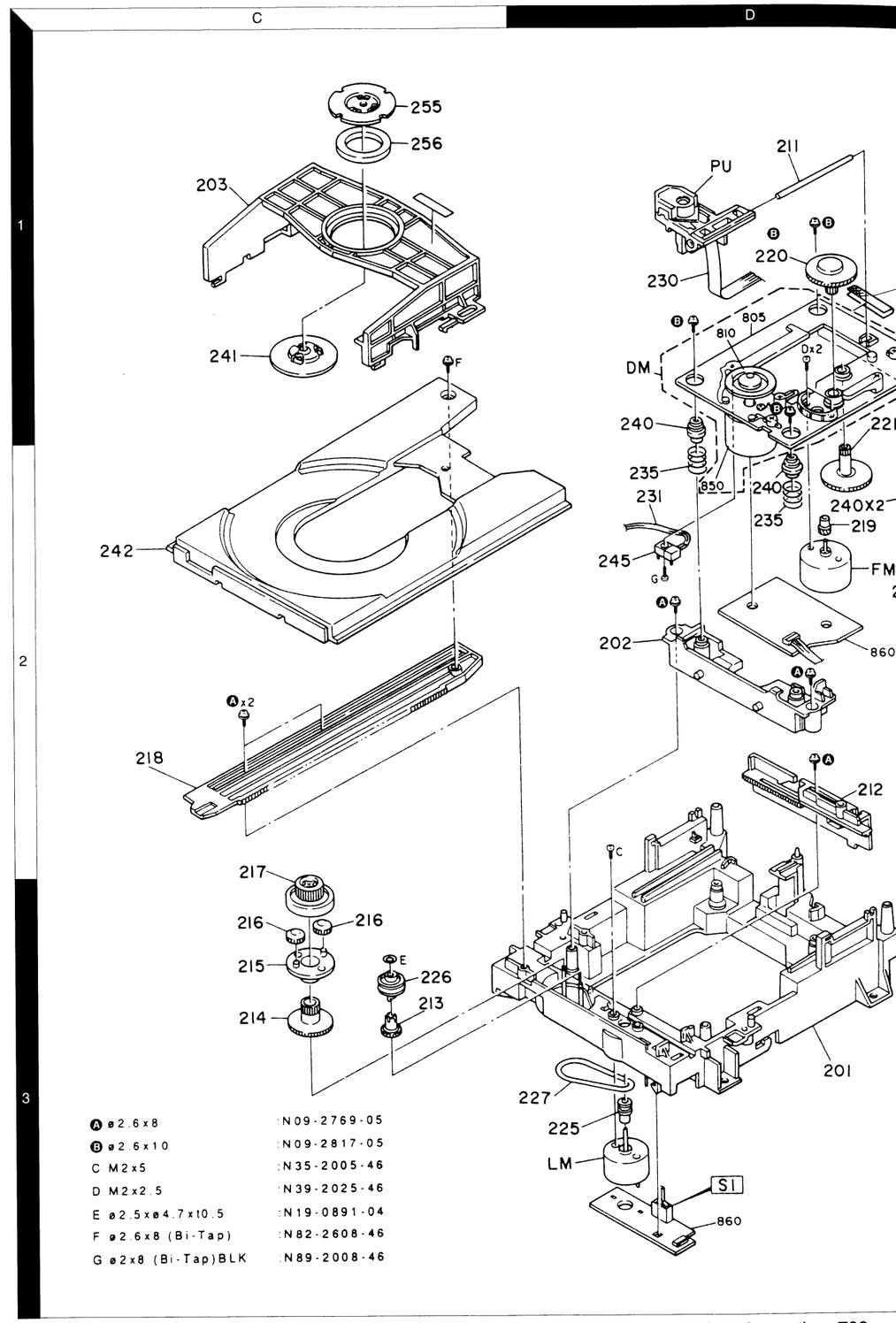

| | | |
|---|---|---|
| A | φ 2.6x8 | : N09-2769-05 |
| B | φ 2.6x10 | : N09-2817-05 |
| C | M2x6 | : N09-2543-05 |
| D | M2.5 | : N39-2025-46 |
| E | φ 2.6x φ 4.7xt0.5 | : N19-0891-04 |
| F | φ 2.6x8 (Bi-Tap) | : N82-2608-46 |
| G | φ 2x8 (Bi-Tap) | : N89-2008-46 |

Parts with the exploded numbers larger than 700 are not supplied



DP-3060

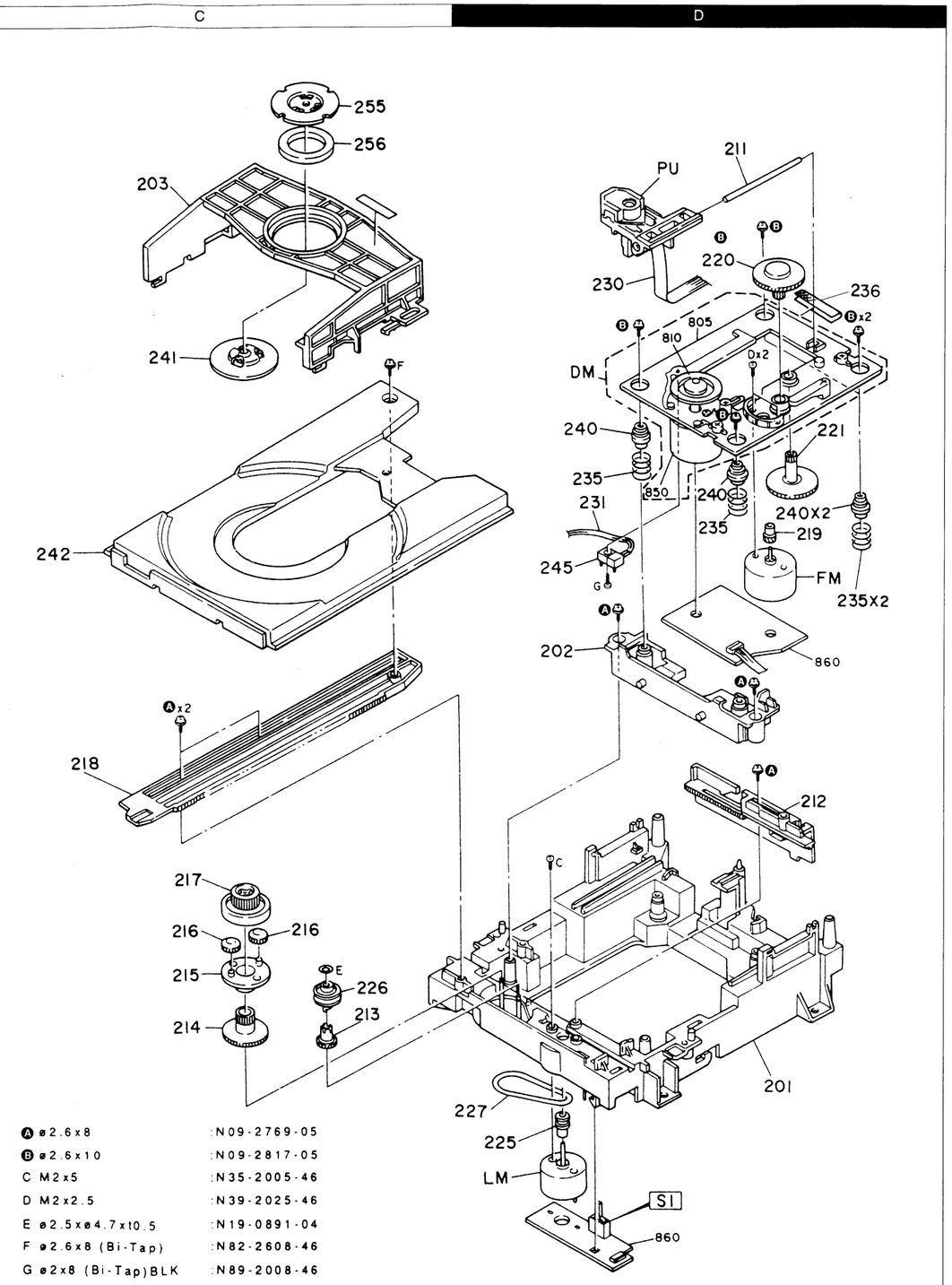
# EXPLODED VIEW (MECHANISM) FRANCE MA




| | | |
|---|---|---|
| A | ø2.6x8 | : N09-2769-05 |
| B | ø2.6x10 | : N09-2817-05 |
| C | M2x5 | : N35-2005-46 |
| D | M2x2.5 | : N39-2025-46 |
| E | ø2.5xø4.7xt0.5 | : N19-0891-04 |
| F | ø2.6x8 (Bi-Tap) | : N82-2608-46 |
| G | ø2x8 (Bi-Tap)BLK | : N89-2008-46 |

Parts with the exploded numbers larger than 700 are

# EXPLODED VIEW (MECHANISM) FRANCE MADE



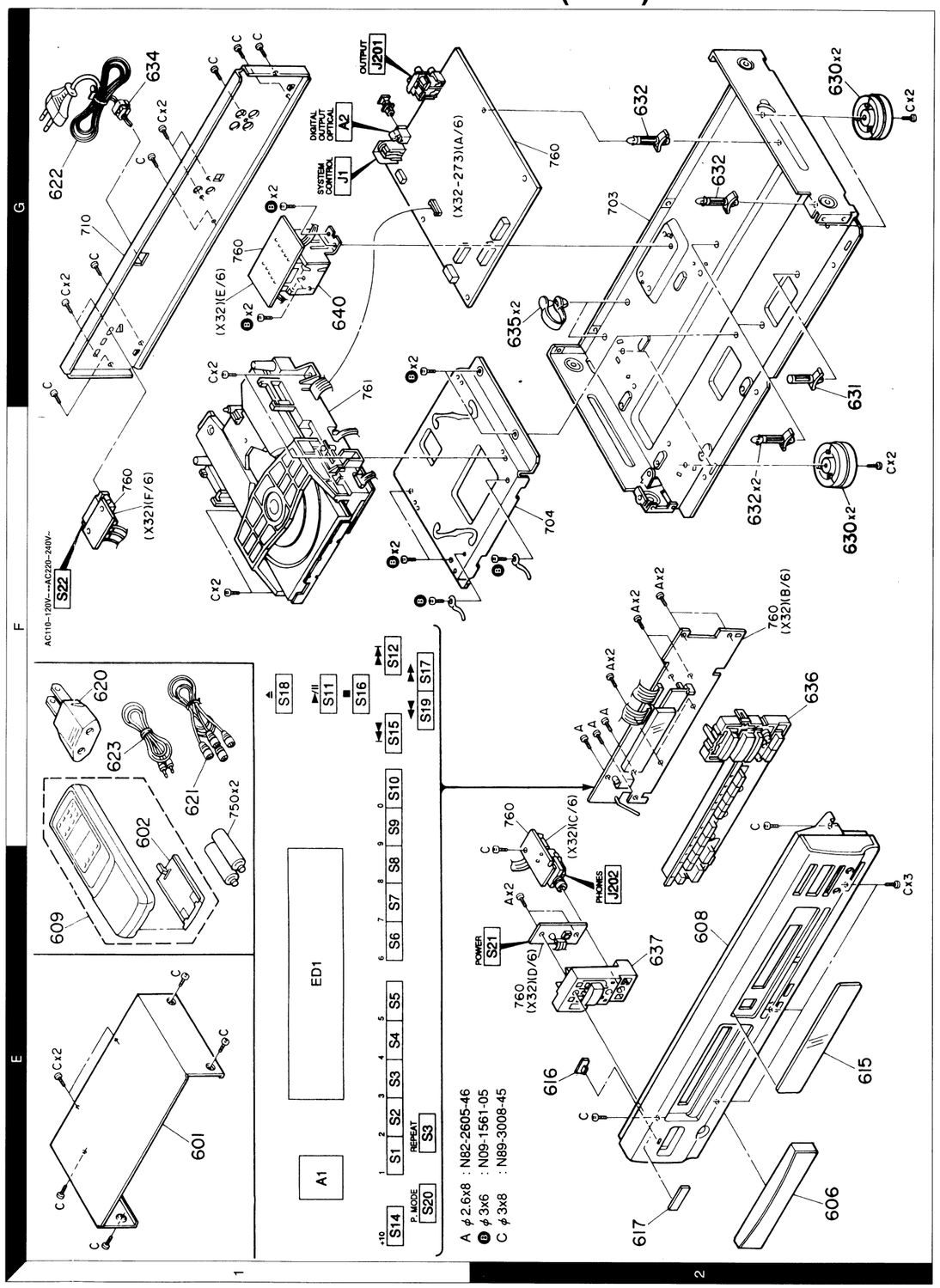

| | |
|---|---|
| A ø2.6x8 | :N09-2769-05 |
| B ø2.6x10 | :N09-2817-05 |
| C M2x5 | :N35-2005-46 |
| D M2x2.5 | :N39-2025-46 |
| E ø2.5xø4.7x10.5 | :N19-0891-04 |
| F ø2.6x8 (Bi-Tap) | :N82-2608-46 |
| G ø2x8 (Bi-Tap)BLK | :N89-2008-46 |

Parts with the exploded numbers larger than 700 are not supplied



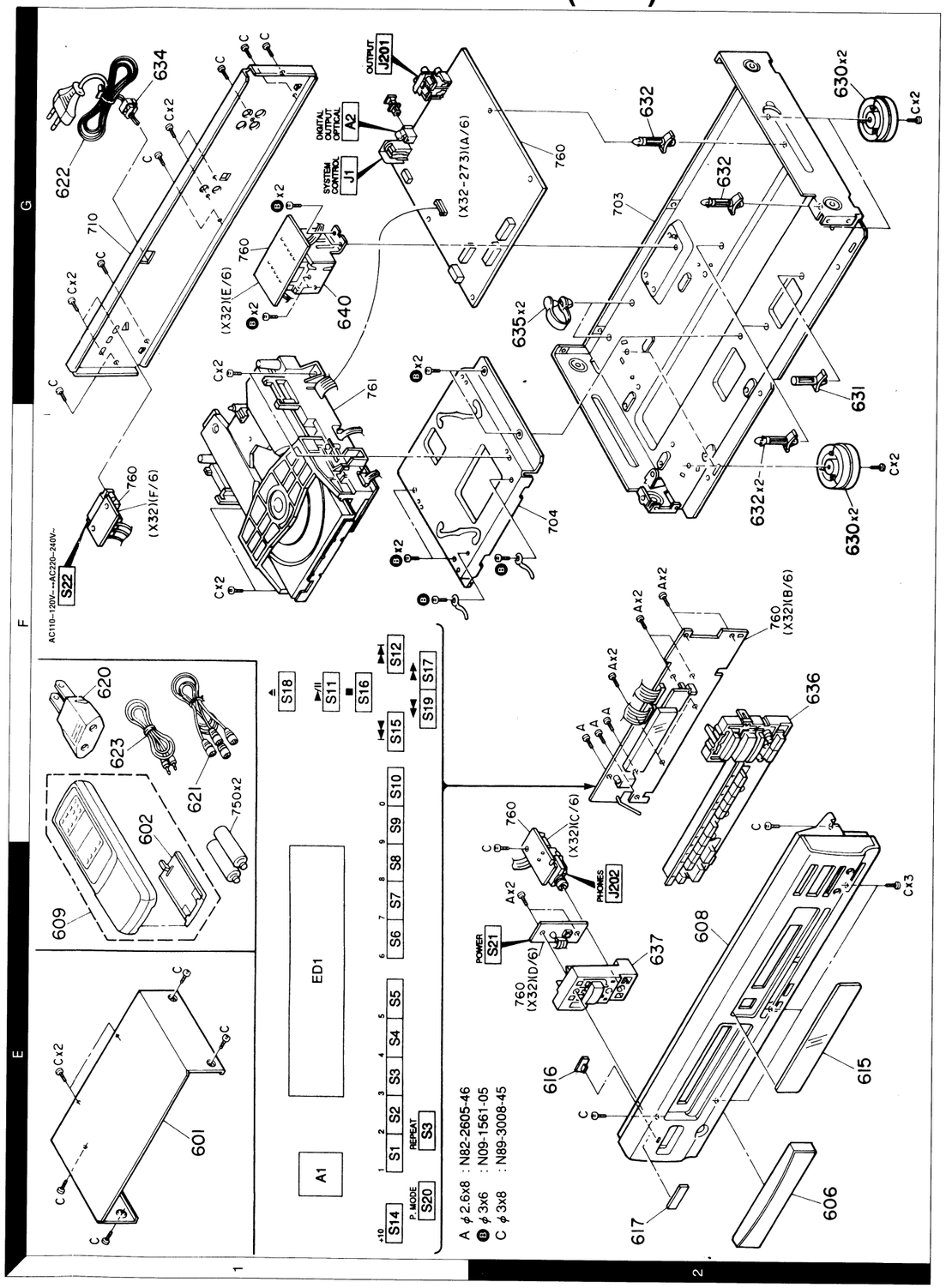


# EXPLODED VIEW(UNIT)




Parts with the exploded numbers larger than 700 are not supplied

## EXPLODED VIEW(UNIT)



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DP-3060

## PARTS LIST

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| | Ref. No. 参照番号 | Address 位置 | New Parts 新 | Parts No. 部品番号 | Description 部品名／規格 | Destination 仕向 | Remarks 備考 |
|---|---|---|---|---|---|---|---|
| | | | | **DP-3060 SINGAPORE MADE** | | | |
| | 601 | 1E | * | A01-3142-01 | METALLIC CABINET | | |
| | 602 | 1F | | A09-0170-08 | BATTERY COVER | | |
| | 606 | 2E | * | A29-0370-03 | PANEL (TRAY) | | |
| | 608 | 2E | * | A60-0591-01 | PANEL | | |
| | 609 | 1E | | A70-0980-05 | REMOCON ASSY(RC-P0701) | | |
| | 615 | 2E | | B03-2896-04 | DRESSING PLATE | | |
| | 616 | 2E | | B12-0240-04 | INDICATOR | | |
| | 617 | 2E | | B43-0287-04 | KENWOOD BADGE | | |
| | - | | | B46-0096-43 | WARRANTY CARD | X | |
| | - | | | B46-0310-03 | WARRANTY CARD | TEG | |
| | - | | | B58-0945-03 | CAUTION CARD | T | |
| | - | | * | B58-0965-13 | CAUTION CARD | XT | |
| | - | | * | B58-0966-13 | CAUTION CARD | ME | |
| | - | | * | B58-0970-13 | CAUTION CARD | G | |
| | - | | | B60-1639-00 | INSTRUCTION MANUAL(ENGLISH) | MXTE | |
| | - | | * | B60-1640-00 | INSTRUCTION MANUAL(GERMAN) | EG | |
| | - | | * | B60-1641-00 | INSTRUCTION MANUAL(FRA,DUT,ITA | E | |
| | - | | | B60-1642-00 | INSTRUCTION MANUAL(SPANISH) | ME | |
| | - | | | B60-1643-00 | INSTRUCTION MANUAL(CHINESE) | M | |
| | - | | * | B60-1781-00 | INSTRUCTION MANUAL(TAIWAN) | M | |
| ⚠ | 620 | 1F | | E03-0115-05 | AC PLUG ADAPTER | M | |
| | 621 | 1F | | E30-0505-05 | AUDIO CORD | | |
| ⚠ | 622 | 1G | | E30-2592-15 | AC POWER CORD | MEG | |
| ⚠ | 622 | 1G | | E30-2717-05 | AC POWER CORD | X | |
| ⚠ | 622 | 1G | | E30-2721-05 | AC POWER CORD | T | |
| | 623 | 1F | | E30-2733-05 | CORD WITH PLUG | | |
| | - | 2G | * | H10-5786-02 | POLYSTYRENE FOAMED FIXTURE(L) | | |
| | - | | * | H10-5787-02 | POLYSTYRENE FOAMED FIXTURE(R) | | |
| | - | | | H12-2201-04 | PACKING FIXTURE | T | |
| | - | | * | H13-0170-04 | CARTON BOARD | X | |
| | - | | | H20-0554-04 | PROTECTION COVER | M | |
| | - | | | H25-0232-04 | PROTECTION BAG (235X350X0.03) | MXEG | |
| | - | | | H25-0330-04 | PROTECTION BAG | XEG | |
| | - | | | H25-0651-04 | PROTECTION BAG | T | |
| | - | | | H25-0658-04 | PROTECTION BAG | T | |
| | - | | * | H50-1106-04 | ITEM CARTON CASE | XEG | |
| | - | | * | H50-1107-04 | ITEM CARTON CASE | M | |
| | - | | * | H50-1108-04 | ITEM CARTON CASE | T | |
| | 630 | 2F,2G | | J02-1034-05 | FOOT | | |
| | 631 | 2G | | J19-3056-05 | UNIT HOLDER | | |
| | 632 | 2F,2G | | J19-3329-05 | UNIT HOLDER | | |
| ⚠ | 634 | 1G | | J42-0083-05 | POWER CORD BUSHING | | |
| | 635 | 2G | | J19-0306-05 | LEAD HOLDER | | |
| | - | | | J11-0163-05 | WIRE CLAMPER | M | |
| | - | | | J61-0307-05 | WIRE BAND | | |
| | 636 | 2F | * | K29-5940-12 | KNOB (R) | | |
| | 637 | 2E | * | K29-5941-03 | KNOB (L) | | |
| ⚠ | 640 | 1G | | L07-0587-05 | POWER TRANSFORMER(115-230V) | M | |
| ⚠ | 640 | 1G | | L07-0588-05 | POWER TRANSFORMER(230V) | XTEG | |

**L:**Scandinavia **K:**USA **P:**Canada **R:**Mexico
**Y:**PX(Far East, Hawaii) **T:**England **E:**Europe **G:**Germany
**Y:**AAFES(Europe) **X:**Australia **M:**Other Areas

⚠ indicates safety critical components.

# PARTS LIST

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| Ref. No. 参照番号 | Address 位置 | New Parts 新 | Parts No. 部品番号 | Description 部品名／規格 | Destination 仕向 | Remarks 備考 |
|---|---|---|---|---|---|---|
| **DP-3060 FRANCE MADE** | | | | | | |
| 601 | 1E | * | A01-3142-01 | METALLIC CABINET | | |
| 602 | 1F | | A09-0170-08 | BATTERY COVER | | |
| 606 | 2E | * | A29-0370-03 | PANEL | | |
| 608 | 2E | * | A60-0591-01 | PANEL | | |
| 609 | 1E | | A70-0980-05 | REMOCON ASSY(RC-P0701) | | |
| 615 | 2E | * | B03-2896-04 | DRESSING PLATE | | |
| 616 | 2E | | B12-0240-04 | INDICATOR | | |
| 617 | 2E | | B43-0287-04 | KENWOOD BADGE | | |
| - | | | B46-0310-03 | WARRANTY CARD | | |
| - | | | B58-0945-03 | CAUTION CARD | T | |
| - | | * | B58-0965-13 | CAUTION CARD | T | |
| - | | * | B58-0966-13 | CAUTION CARD | E | |
| - | | * | B58-0970-13 | CAUTION CARD | G | |
| - | | | B60-1639-00 | INSTRUCTION MANUAL(ENGLISH) | ET | |
| - | | * | B60-1640-00 | INSTRUCTION MANUAL(DERMAN) | EG | |
| - | | * | B60-1641-00 | INSTRUCTION MANUAL(FRA,DUT,ITA | E | |
| - | | | B60-1642-00 | INSTRUCTION MANUAL(SPANISH) | E | |
| 621 | 1F | | E30-0505-05 | AUDIO CORD | | |
| ⚠ 622 | 1G | | E30-2592-15 | AC POWER CORD | EG | |
| ⚠ 622 | 1G | | E30-2721-05 | AC POWER CORD | T | |
| 623 | 1F | | E30-2733-05 | CORD WITH PLUG | | |
| - | | * | H10-5788-02 | POLYSTYRENE FOAMED FIXTURE(L) | | |
| - | | * | H10-5789-02 | POLYSTYRENE FOAMED FIXTURE(R) | | |
| - | | | H11-0050-04 | POLYSTYRENE FOAMED BOARD | T | |
| - | | | H13-0133-04 | CARTON BOARD | T | |
| - | | | H25-0232-04 | PROTECTION BAG (235X350X0.03) | EG | |
| - | | | H25-0330-04 | PROTECTION BAG | EG | |
| - | | | H25-0651-04 | PROTECTION BAG | T | |
| - | | | H25-0658-04 | PROTECTION BAG | T | |
| - | | * | H50-1264-04 | ITEM CARTON CASE | EG | |
| - | | * | H50-1265-04 | ITEM CARTON CASE | T | |
| 630 | 2F | | J02-1034-05 | FOOT | | |
| 631 | 2G | | J19-3056-05 | UNIT HOLDER | | |
| 632 | 2F,2G | | J19-3329-05 | UNIT HOLDER | | |
| ⚠ 634 | 1G | | J42-0083-05 | POWER CORD BUSHING | | |
| 635 | 2G | | J19-0306-05 | LEAD HOLDER | | |
| - | | | J61-0307-05 | WIRE BAND | | |
| 636 | 2F | * | K29-5940-12 | KNOB | | |
| 637 | 2E | * | K29-5941-03 | KNOB | | |
| ⚠ 640 | 1G | | L07-0588-05 | POWER TRANSFORMER | | |
| **MECHANISM PCB(X25-4840-21)** | | | | | | |
| S1 | 3D | | S33-2062-05 | LEVER SWITCH | | |
| **CONTROL(X32-2730-21)** | | | | | | |
| D204 | | | B30-1288-05 | LED | | |
| C1 | | | CE04LW1A101MCC | ELECTRO 100UF 10WV | | |
| C2 | | | CF92FV1H103J | MF 0.010UF J | | |
| C3 | | | C90-1826-05 | BACKUP 0.047F 5.5WV | | |
| C4 | | | CE04LW1H010MCC | ELECTRO 1.0UF 50WV | | |
| C5 | | | CF92FV1H103J | MF 0.010UF J | | |

**L**:Scandinavia **K**:USA **P**:Canada **R**:Mexico
**Y**:PX(Far East, Hawaii) **T**:England **E**:Europe **G**:Germany
**Y**:AAFES(Europe) **X**:Australia **M**:Other Areas

⚠ indicates safety critical components.

# DP-3060

## PARTS LIST

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Telle ohne **Parts No.** werden nicht geliefert.

| Ref. No. 参照番号 | Address 位置 | New Parts 新 | Parts No. 部品番号 | Description 部品名／規格 | | Destination 仕向 | Remarks 備考 |
|---|---|---|---|---|---|---|---|
| C6 | | | CE04LW1A101MCC | ELECTRO | 100UF 10WV | | |
| C7 | | | CE04LW1C470MCC | ELECTRO | 47UF 16WV | | |
| C8 | | | CF92FV1H101K | MF | 100PF K | | |
| C9 | | | CE04LW1A101MCC | ELECTRO | 100UF 10WV | | |
| C10 | | | CF92FV1H104J | MF | 0.10UF J | | |
| C11 | | | CE04LW1H4R7MCC | ELECTRO | 4.7UF 50WV | | |
| C12 | | | CF92FV1H103J | MF | 0.010UF J | | |
| C13 | | | CF92FV1H221K | MF | 220PF K | | |
| C14 | | | CF92FV1H472J | MF | 4700PF J | | |
| C15 | | | CF92FV1H473J | MF | 0.047UF J | | |
| C16 | | | CF92FV1H152J | MF | 1500PF J | | |
| C17 | | | CF92FV1H103J | MF | 0.010UF J | | |
| C18 | | | CF92FV1H104J | MF | 0.10UF J | | |
| C19 -21 | | | CF92FV1H471J | MF | 470PF J | | |
| C22 ,23 | | | CF92FV1H331K | MF | 330PF K | | |
| C24 | | | CF92FV1H221K | MF | 220PF K | | |
| C25 ,26 | | | CF92FV1H331K | MF | 330PF K | | |
| C27 | | | CF92FV1H104J | MF | 0.10UF J | | |
| C28 | | | CF92FV1H103J | MF | 0.010UF J | | |
| C29 | | | CF92FV1H682J | MF | 6800PF J | | |
| C30 | | | CF92FV1H472J | MF | 4700PF J | | |
| C31 ,32 | | | CF92FV1H272J | MF | 2700PF J | | |
| C33 ,34 | | | CF92FV1H104J | MF | 0.10UF J | | |
| C35 | | | CF92FV1H102J | MF | 1000PF J | | |
| C36 -41 | | | CF92FV1H104J | MF | 0.10UF J | | |
| C42 | | | CC45FSL1H180J | CERAMIC | 18PF J | | |
| C43 | | | CE04LW1C330MCC | ELECTRO | 33UF 16WV | | |
| C44 -46 | | | CF92FV1H104J | MF | 0.10UF J | | |
| C47 ,48 | | | CE04LW1V101MCC | ELECTRO | 100UF 35WV | | |
| C49 | | | CE04LW0J221MCC | ELECTRO | 220UF 6.3WV | | |
| C50 | | | CF92FV1H104J | MF | 0.10UF J | | |
| C51 | | | CF92FV1H151K | MF | 150PF K | | |
| C52 ,53 | | | C91-1474-05 | FILM | 100PF J | | |
| C101,102 | | | CE04LW0J471MCC | ELECTRO | 470UF 6.3WV | | |
| C103 | | | CE04LW1H010MCC | ELECTRO | 1.0UF 50WV | | |
| C104 | | | CE04LW1C330MCC | ELECTRO | 33UF 16WV | | |
| C105 | | | CF92FV1H103J | MF | 0.010UF J | | |
| C106 | | | CE04LW1C222MCC | ELECTRO | 2200UF 16WV | | |
| C107 | | | CE04LW1C332MCC | ELECTRO | 3300UF 16WV | | |
| C108 | | | CE04LW1V100MCC | ELECTRO | 10UF 35WV | | |
| C109 | | | CE04LW1H4R7MCC | ELECTRO | 4.7UF 50WV | | |
| C110 | | | CE04LW1J221MCC | ELECTRO | 220UF 63WV | | |
| C151,152 | | | CF92FV1H221K | MF | 220PF K | | |
| C153 | | | CF92FV1H103J | MF | 0.010UF J | | |
| C201 | | | CF92FV1H104J | MF | 0.10UF J | | |
| C202 | | | CF92FV1H101K | MF | 100PF K | | |
| C203 | | | CF92FV1H104J | MF | 0.10UF J | | |
| C204 | | | CC45FSL1H330J | CERAMIC | 33PF J | | |
| C205 | | | CF92FV1H121K | MF | 120PF K | | |
| C206 | | | CF92FV1H104J | MF | 0.10UF J | | |
| C208 | | | CC45FSL1H220J | CERAMIC | 22PF J | | |
| C209-213 | | | CE04LW1A101MCC | ELECTRO | 100UF 10WV | | |
| C214 | | | CF92FV1H104J | MF | 0.10UF J | | |
| C215-220 | | | CF92FV1H331K | MF | 330PF K | | |
| C221,222 | | | CF92FV1H682J | MF | 6800PF J | | |

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|---|---|---|---|---|---|---|
| C223,224 | | | CF92FV1H561J | MF 560PF J | | |
| C225,226 | | | CE04LW1H470MCC | ELECTRO 47UF 50WV | | |
| C227-230 | | | CF92FV1H681J | MF 680PF J | | |
| C231,232 | | | CF92FV1H221K | MF 220PF K | | |
| C233 | | | CF92FV1H103J | MF 0.010UF J | | |
| C234-236 | | | CF92FV1H104J | MF 0.10UF J | | |
| C237 | | | CE04LW1A101MCC | ELECTRO 100UF 10WV | | |
| C240 | | | CF92FV1H333J | MF 0.033UF J | | |
| C241 | | | CF92FV1H102J | MF 1000PF J | | |
| J1 | 1G | | E11-0188-05 | MINIATURE PHONE JACK(SYS/CON) | | |
| J201 | 1G | | E63-0120-05 | PHONO JACK | | |
| J202 | 2E | | E11-0208-05 | PHONE JACK (PHONES) | | |
| - | | | J11-0098-05 | WIRE CLAMPER | | |
| L3 | | | L92-0018-05 | FERRITE CORE | | |
| X1 | | | L78-0267-05 | RESONATOR (4.194MHZ) | | |
| X2 | | | L77-2133-05 | CRYSTAL RESONATOR(16.9344MHZ-1 | | |
| R101,102 | | | RN14BK2C3301F | RN 3.30K F 1/6W | | |
| S1 -21 | 1E,1F | | S40-1064-05 | PUSH SWITCH | | |
| ⚠ S22 | 1F | | S62-0001-05 | SLIDE SWITCH | M | |
| D1 -7 | | | HSS104 | DIODE | | |
| D1 -7 | | | 1SS133 | DIODE | | |
| D8 | | | MTZJ6.2(B) | ZENER DIODE | | |
| D8 | | | RD6.2ES(B2) | ZENER DIODE | | |
| D9 -17 | | | HSS104 | DIODE | | |
| D9 -17 | | | 1SS133 | DIODE | | |
| D101 | | | HSS104 | DIODE | | |
| D101 | | | 1SS133 | DIODE | | |
| D102 | | | HZS5.1S(B2) | ZENER DIODE | | |
| D102 | | | RD5.1JS(B2) | ZENER DIODE | | |
| D103,104 | | | HSS104 | DIODE | | |
| D103,104 | | | 1SS133 | DIODE | | |
| D107 | | | 1B4B41 | DIODE | | |
| D111 | | | S5688B | DIODE | | |
| D111 | | | 1SR139-100 | DIODE | | |
| D112 | | | MTZJ5.6(B) | ZENER DIODE | | |
| D112 | | | RD5.6ES(B2) | ZENER DIODE | | |
| D151-158 | | | HSS104 | DIODE | | |
| D151-158 | | | 1SS133 | DIODE | | |
| D201 | | | MTZJ5.6(B) | ZENER DIODE | | |
| D201 | | | RD5.6ES(B2) | ZENER DIODE | | |
| D202,203 | | | HSS104 | DIODE | | |
| D202,203 | | | 1SS133 | DIODE | | |
| ED1 | 1E | | FIP9KM5 | INDICATOR TUBE | | |
| IC1 | | | UPD78044AGF-036 | MI-COM IC | | |
| IC2 | | | MN1381-R(TA) | IC(VOLTAGE DETECT) | | |
| IC3 | | | CXD2515Q | IC | | |
| IC5 ,6 | | | TA8410AK | IC(POWER OP AMP) | | |
| IC7 | | | TA8409S | IC(MOTOR CONTROL) | | |
| IC101 | | | NJM4558D | IC(OP AMP X2) | | |
| IC202 | | | SM5872BS | MOS-IC | | |
| IC203,204 | | | NJM4565L | IC(OP AMP X2) | | |
| IC205 | | | NJM4580D | IC(OP AMP X2) | | |

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# DP-3060

## PARTS LIST

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|---|---|---|---|---|---|---|
| Q1 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q1 | | | 2SC2785(F,E) | TRANSISTOR | | |
| Q2 | | | 2SC3940A | TRANSISTOR | | |
| Q101,102 | | | 2SD2012 | TRANSISTOR | | |
| Q103 | | | 2SA1534A | TRANSISTOR | | |
| Q104 | | | 2SK163(L,M) | FET | | |
| Q105 | | | 2SC2878(B) | TRANSISTOR | | |
| Q106 | | | 2SA1175(F,E) | TRANSISTOR | | |
| Q106 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q107 | | | 2SC3940A | TRANSISTOR | | |
| Q201 | | | DTC124ES | DIGITAL TRANSISTOR | | |
| Q201 | | | UN4212 | TRANSISTOR | | |
| Q202,203 | | | 2SK161(GR) | FET | | |
| Q204 | | | DTC124ES | DIGITAL TRANSISTOR | | |
| Q204 | | | UN4212 | TRANSISTOR | | |
| Q205-208 | | | 2SC2878(B) | TRANSISTOR | | |
| A1 | 1E | | W02-1174-05 | ELECTRIC CIRCUIT MODULE | | |
| A2 | 1G | | W02-1114-05 | OSCILLATING MODULE | | |
| 101 | 3B | * | A10-2974-11 | CHASSIS (MAIN) | | |
| 102 | 2B | | A11-0756-03 | SUB CHASSIS (FRAME) | | |
| 103 | 1A | | A11-0757-02 | SUB CHASSIS (CLAMPER) | | |
| 111 | 1B | | D10-2490-04 | ROD | | |
| 112 | 2B | | D10-3253-03 | SLIDER | | |
| 113 | 3A | | D13-0975-04 | GEAR (INTERMEDATE) | | |
| 114 | 3A | | D13-0976-03 | GEAR (CENTER) | | |
| 115 | 3A | | D13-0977-03 | GEAR (CARRIER) | | |
| 116 | 3A | | D13-0978-03 | GEAR (IDLER) | | |
| 117 | 3B | | D13-0979-03 | GEAR | | |
| 118 | 3B | | D13-0980-02 | LACK (GEAR) | | |
| 119 | | | D13-0894-05 | GEAR (MOTOR) | | |
| 120 | | | D13-0895-05 | GEAR (INTERMEDATE) | | |
| 121 | | | D13-0896-05 | GEAR (FEED) | | |
| 125 | 3B | | D15-0328-04 | MOTOR PULLEY | | |
| 126 | | | D15-0329-03 | PULLEY | | |
| 127 | | | D16-0333-03 | BELT | | |
| 135 | | | G01-3326-14 | COMPRESSION SPRING | | |
| 136 | | | G10-0146-04 | NON-WOVEN FABRIC | | |
| 140 | 1B,2B | | J02-1058-15 | INSULATOR | | |
| 141 | 1A | | J11-0180-03 | CLAMPER | | |
| 142 | 2A | | J99-0514-01 | TRAY | | |
| S1 | 3B | | S33-2062-05 | LEVER SWITCH | | |
| S2 | 2B | | S33-1022-05 | LEVER SWITCH | | |
| 155 | 1A | | T50-1058-04 | YOKE | | |
| 156 | 1A | | T99-0503-15 | MAGNET | | |
| DM | 1B | | A11-0733-05 | SUB CHASSIS ASSY(DISC MOTOR) | | |
| FM | 2B | | T42-0532-05 | DC MOTOR (FEED MOTOR) | | |
| LM | 3B | | T42-0609-05 | DC MOTOR (LOADING MOTOR) | | |
| PU | 1B | | T25-0022-05 | OPTICAL PICKUP HEAD | | |
| **MECHANISM(X92-1760-81)** | | | | | | |
| 201 | 3D | * | A10-2978-11 | CHASSIS (MAIN) | | |

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|---|---|---|---|---|---|---|
| 202 | 2D | | A11-0758-03 | SUB CHASSIS (FRAME) | | |
| 203 | 1C | * | A11-0760-02 | SUB CHASSIS (CLAMPER) | | |
| 211 | 1D | | D10-2490-04 | ROD | | |
| 212 | 1D | | D10-3253-03 | SLIDER | | |
| 213 | 3C | | D13-0975-04 | GEAR (INTER MEDIATE) | | |
| 214 | 3C | | D13-0976-03 | GEAR (CENTER) | | |
| 215 | 3C | | D13-0977-03 | GEAR (CARRIER) | | |
| 216 | 3C | | D13-0978-03 | GEAR (IDLER) | | |
| 217 | 2C | | D13-0979-03 | GEAR | | |
| 218 | 2C | | D13-0980-02 | LACK (GEAR) | | |
| 219 | 2D | | D13-0894-05 | GEAR (MOTOR) | | |
| 220 | 1D | | D13-0895-05 | GEAR (INTERMEDITE) | | |
| 221 | 1D | | D13-0896-05 | GEAR (FEED) | | |
| 225 | 3D | | D15-0328-04 | MOTOR PULLEY | | |
| 226 | 3C | | D15-0329-03 | PULLEY | | |
| 227 | 3D | | D16-0333-03 | BELT | | |
| 230 | 1D | * | E35-0903-15 | FLAT CABLE | | |
| 231 | 2D | | E35-0420-05 | LEAD WIRE | | |
| 235 | 2D | | G01-3465-04 | COMPRESSION SPRING | | |
| 236 | 1D | | G10-0146-04 | NON-WOVEN FABRIC | | |
| 240 | 1D,2D | | J02-1058-15 | INSULATOR | | |
| 241 | 1C | | J11-0180-03 | CLAMPER | | |
| 242 | 2C | | J99-0515-01 | TRAY | | |
| 245 | 2D | | S33-1022-05 | LEVER SWITCH | | |
| 255 | 1C | | T50-1058-04 | YOKE | | |
| 256 | 1C | | T99-0503-15 | MAGNET | | |
| DM | 1D | | A11-0733-05 | SUB CHASSIS ASSY(DISC MOTOR) | | |
| FM | 3D | | T42-0532-05 | DC MOTOR (FEED) | | |
| LM | 3D | | T42-0609-05 | DC MOTOR (LOADING) | | |
| PU | 1D | | T25-0024-05 | OPTICAL PICKUP HEAD(KSS-240A) | | |

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# DP-3060

## SPECIFICATIONS

**[Format]**
**System** ..... Compact disc digital audio system
**Laser** ..... Semiconductor laser
**Number of channels** ..... 2 channels
**Playing rotation** ..... 200 rpm ~ 500 rpm (CLV)

**[D/A Convertors]**
**D/A conversion** ..... Twin 1 Bit
**Oversampling** ..... 8 fs (352.8 kHz)

**[Audio]**
**Frequency response** ..... 4 Hz ~ 20 kHz, ±0.5 dB
**Signal to noise ratio** ..... More than 100 dB
**Dynamic range** ..... More than 97 dB
**Total harmonic distortion** ..... Less than 0.0022% (1 kHz)
**Channel separation** ..... More than 98 dB (1 kHz)
**Wow & flutter** ..... Unmeasurable Limit
**Output level/impedance**
**Variable** ..... 0 ~ 2 V/0.4kΩ
**Digital output**
**Optical** ..... –15 dBm ~ –21 dBm (Wave length 660 nm)
**Headphone output** ..... 20 mW (32 Ω)

**[General]**
**Power consumption** ..... 10 W
**Dimensions** ..... W: 440 mm (17-5/16")
H : 107 mm (4-3/16")
D : 270 mm (10-5/8")
**Weight (Net)** ..... 3.5 kg (7.9 lb)

Note:
KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

**Note :**
Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S.A.(K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.


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